

What is claimed is:

1. An external battery pack comprising:
a secondary battery;
5 an internal circuit;
a housing having the secondary battery and the internal circuit; and
an inserting portion formed in the housing,
wherein the inserting portion is capable of inserting and fixing an portable
electronic device.
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2. The external battery pack of claim 1, wherein the external battery pack further
comprises a pen type fixing unit having a holding part, the pen type fixing unit is formed
at a rear side of the housing for being held on clothing or a belt.
- 15 3. The external battery pack of claim 1 or claim 2, wherein the inserting portion
comprises a supporting portion on a front bottom side of the housing and an inserting rib
on both lateral sides of the housing.
4. The external battery pack of claim 3, wherein the inserting portion further
20 comprises a fixing hook capable of moving in a vertical direction.
5. An external battery pack of claim 3, wherein the inserting portion further
comprises a detaching protection portion capable of moving up and down, the detaching
protection portion is connected to an elastic material installed in the housing.
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6. The external battery pack of claim 2, wherein the internal circuit comprises:
a charging connector for receiving power source;
a charging circuit unit for charging the secondary battery by converting the
received power source into constant voltage; and
30 a power source output connector for outputting the charged voltage in the
secondary battery into one of an power source input terminal of the portable electronic
device and a charging connection terminal of a battery of the portable electronic device.

7. The external battery pack of claim 6, wherein the internal circuit further comprises a DC/DC voltage converting circuit for converting an inputted voltage from the secondary battery into a given level of DC voltage.
- 5 8. The external battery pack of claim 7, wherein the internal circuit further comprises an output circuit unit for outputting the inputted power source from the DC/DC voltage converting circuit, the inputted power source maintains constant voltage and constant current.
- 10 9. The external battery pack of claim 2, wherein the internal circuit comprises:
a charging connector for receiving power source supply;
a DC/DC voltage converting circuit for converting an inputted voltage from the secondary battery into a given level of DC voltage; and
a power source output connector for outputting the given level of DC voltage in
15 the DC/DC voltage converting circuit into one of an power source input terminal of the portable electronic device and a charging connection terminal of a battery of the portable electronic device.
- 20 10. The external battery pack of claim 9, wherein the internal circuit further comprises an output circuit unit for outputting the inputted power source maintaining constant voltage and constant current from the DC/DC voltage converting circuit, wherein the output circuit unit is configured between the DC/DC voltage converting circuit unit and the power source output connector.
- 25 11. The external battery pack of any one of claim 6 to claim 10, wherein the internal circuit further comprises a protecting circuit unit for protecting electrical performance of the secondary battery.
- 30 12. The external battery pack of claim 2, wherein the internal circuit comprises:
a charging connector for receiving power source supply;
a charging circuit unit for charging the secondary battery by converting the received power source into constant voltage;

a protecting circuit unit for protecting electrical performance of the secondary battery, the protecting circuit unit being electrically connected between the charging connector and the charging circuit unit;

5 a DC/DC voltage converting circuit for converting an inputted voltage from the protecting circuit unit into a given level of DC voltage;

an output circuit unit for outputting the inputted power source maintaining constant voltage and constant current from the DC/DC voltage converting circuit.

10 a power source output connector for outputting the given level of DC voltage in the DC/DC voltage converting circuit into a charging connecting terminal of a battery of the portable electronic device;

a battery remaining display circuit unit for detecting a battery charge remaining status of the secondary battery;

a battery remaining display unit for displaying a battery charge remaining status according to a signal inputted from the battery remaining display circuit unit.

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13. The external battery pack of claim 12, wherein the charging circuit unit and the outputting circuit unit are combined to be a charging/outputting circuit unit and the internal circuit further comprises a circuit converting connector for converting a circuit wire connection according to electrical connections between the charging circuit unit and
20 the internal circuit, and between the outputting circuit unit and the internal circuit.